Item #39: Regeneration Certified as Completed

Evaluation Question: Are cutover areas being regenerated within prescribed time limits and standards? Are Forest Plan projections for regeneration being met?

Resources to be measured:

- Acres of regeneration certified as completed by year

Data Sources: FACTS data queries
Flathead Forest Fire GIS layer
Annual Reforestation/TSI Needs Reports

Prior to any harvest activity, a detailed silvicultural prescription is developed to spell out treatment steps to move the stand towards the desired future condition. For regeneration harvests, this includes steps needed to prepare an area for restocking, site preparation, planting or natural regeneration, and subsequent surveys to assess reforestation progress. Based on these surveys, post-treatment condition is compared to the planned desired conditions, and a stand is determined to be progressing, certified as stocked, or failing.

The Flathead National Forest has good growing sites which are generally quite easily reforested when prescribed treatments are followed. Every harvest unit has 3 to 4 follow-up examinations, to assess the treatment progress. There is an excellent monitoring system in place to identify and resolve the few reforestation problems which occur. Stands which have a survey identifying them as failing to meet desired regeneration levels are subsequently re-treated, usually by planting additional trees, and re-surveyed to assure that they do ultimately meet desired tree species composition and overall tree numbers.

Timeframe to regeneration was identified in the past as a monitoring item, but has not generally been an issue. National Forest Management Act (NFMA) requires us to have assurance that a site can be reforested within 5 years of harvest. For planted areas, the vast majority are certified as stocked on schedule as displayed above, with either a 3rd or 5th year survey (after planting). For naturally regenerated stands, it may take slightly longer to have well established trees to actually meet certification requirements; however stands are usually identified as progressing at the 3rd year survey, with certification on schedule at the 5th year. A small proportion of stands may require an additional survey at year 6 or 7 years to assure that an adequate number of seedlings are well established and will survive.

The following figures display the variable levels of disturbance on the Flathead National Forest over the last decade, along with the identified need for reforestation, and reforestation treatments.

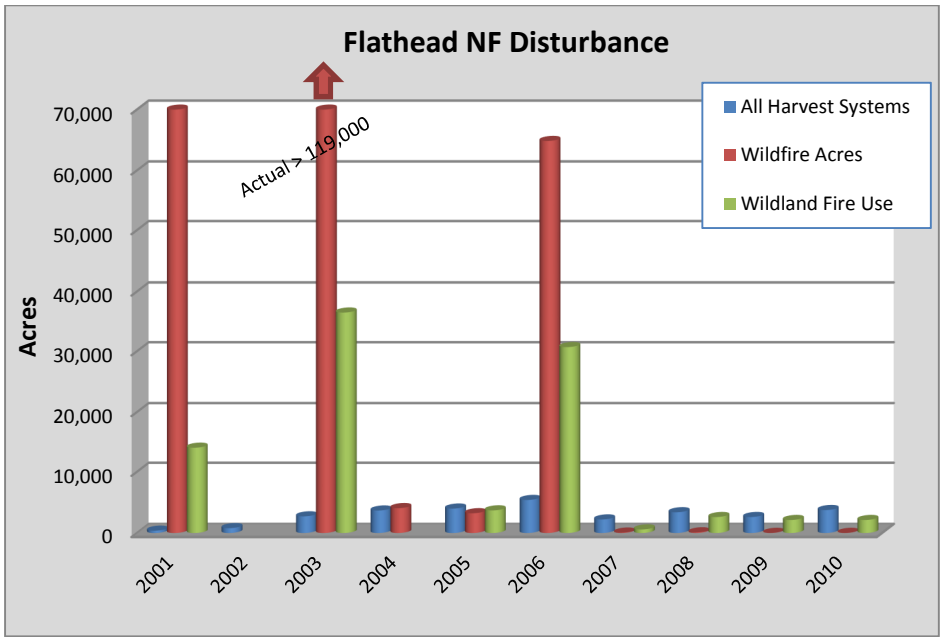
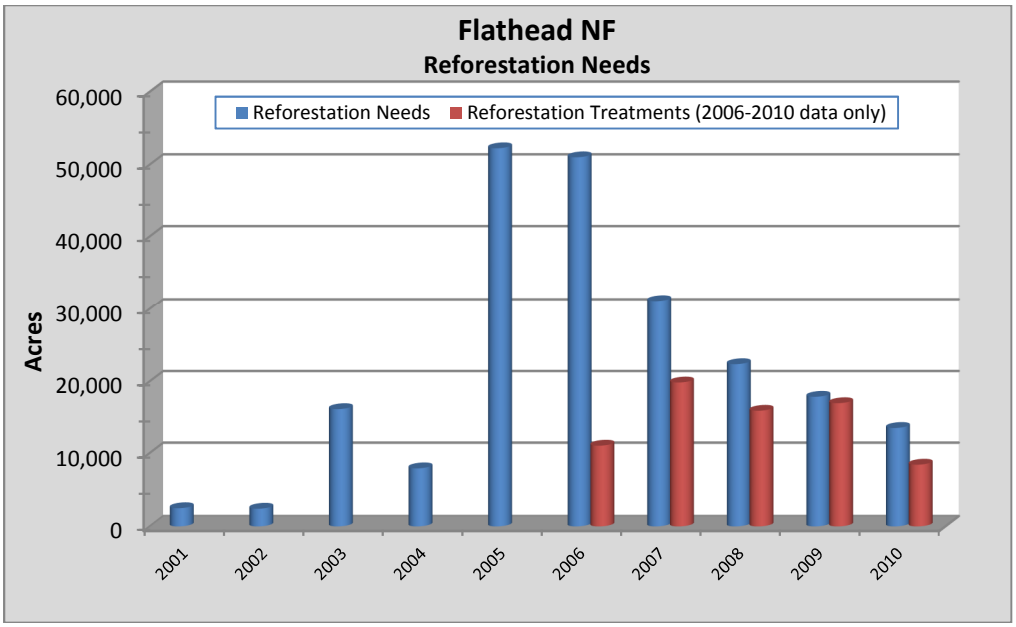


Figure 1. Type of Vegetation Disturbance 2001 - 2010

It can be seen that the vast majority of disturbance, as well as reforestation activity is related to fire rather than harvest activity. Three years with extensive fire activity account for 97% of the total disturbance over the last decade. Following large fires, it may take several years to complete surveys to determine reforestation status and needs. Where needed, planting of harvested areas is generally scheduled to follow within one to two years of harvest, depending on the availability of seedling s and year to year funding. Seedlings are grown in a Forest Service nursery for one to two years prior to out-planting in the harvested areas.

With the establishment of a national activity tracking system, some of the regional reporting tools previously available for tracking timeframes to stand certification are no longer available. The Reforestation/Timber Stand Improvement Needs Report has been developed to display whether reforestation treatments are keeping pace with reforestation needs.



Note: Reforestation Treatment include planting, site preparation for natural regeneration, and certification without site preparation. Reported beginning in 2006.

Figure 2. Reforestation Needs 2001 - 2010

Since 2005, reforestation needs have been steadily declining, despite an additional large wildfire "pulse" in 2006. This is associated with the forest "gearing up" for large exam and reforestation programs following large wildfires. To supplement the available appropriated funding, grant funding including National Arbor Day Foundation monies have been used to plant burned areas. Over the past five years, most of the forest regeneration activities have been associated with past wildfires.

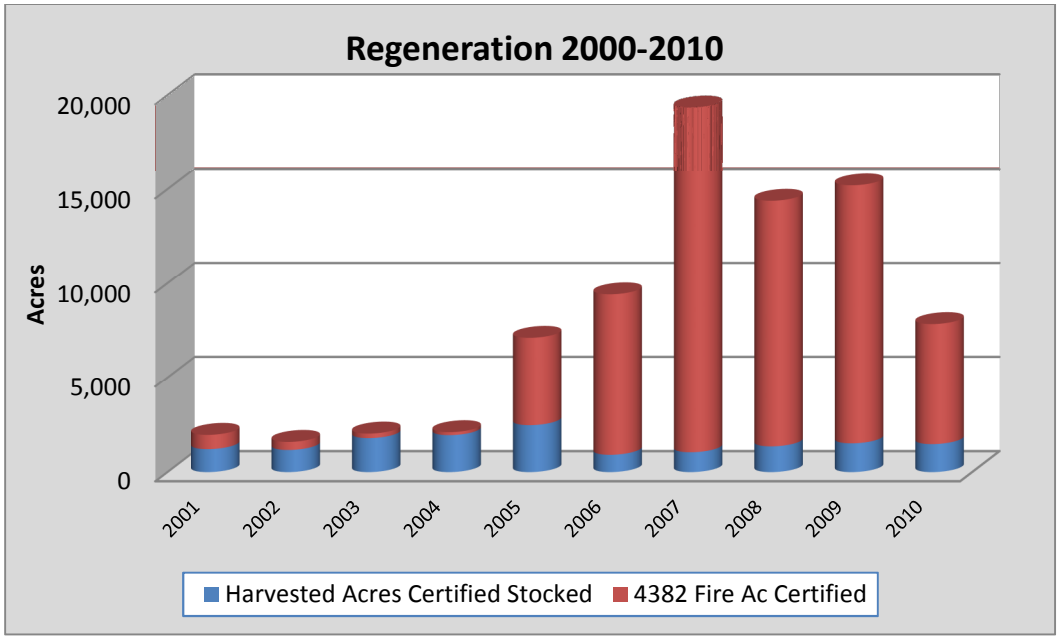


Figure 3. Regeneration Activity 2001 - 2010

Overall, cutover areas, as well as inadequately stocked areas burned by wildfire, are being regenerated. No long-term reforestation problems have been identified on the forest.

Refer to Item #34 for further discussion of Regeneration Harvest acres in comparison to Forest Plan projections.

Recommended Actions: Continue to monitor